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### **REMARKS**

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

### **Status of Claims**

Claims 12-54 are pending in the application. Claims 12-54 have been rejected.

### **CLAIM REJECTIONS**

#### **35 U.S.C. § 102 Rejections**

In the Office Action, the Examiner rejected claims 26, 28-29, 33-34, 36, 37, and 39-40 under 35 U.S.C. § 102(b), as allegedly being anticipated by Schreiber (Proceedings of the IEEE, vol.83, No.6). Applicants respectfully traverse these rejections on the grounds that there appears to have been a misinterpretation of portions of Schreiber's Fig. 1, which has lead to a set of incorrect inferences forming the basis of these 102 rejections. A careful reading of the Schreiber reference relating to the relied upon Fig. 1 clearly indicates that Fig. 1 and its associated descriptions with the cited reference actually teaching away from the claimed frame by frame compression/transmission limitations claimed in the rejected independent claims. More specifically, Schreiber states that Fig. 1 relates to motion based compression and that the suitable solutions for video transmission are shown in the motion based compression system of Fig. 6, which motion based compression system is associated with the compression scheme of Fig. 1.

In the office action at issue, the Examiner states that:

"Schreiber shows in the Pyramid coding (Fig.6) the prediction based Motion compensation using previous or post frame. However, this is a just one example of the coder using Pyramid coding (Fig.1). For claims 26, 42 and 50, it was well known that motion estimation requires computation complexity and it was obvious to try the coder without Motion Compensation by only using transformation (TRANSFORM,

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Fig.6; OCT or wavelet transform) of low passed filtered signal and transmitting coefficients, which is similar to Intra coding of MPEG or JPEG (Schreiber: pp.958) (JPEG is not doing any motion compensation and only does intra coding), in order to reduce complexity of the coder. **Regarding claim 12, the examiner proposes substituting the source coding based on MPEG (Fig.6) for the level 1 (coarse portion) with near-lossless encoder, in order to provide low complexity compression.**" [24 June 2011 Office Action – Paragraph 5]

Aside and apart from the fact that the Examiner appears to be suggesting modifications to the teachings of the cited primary reference based on an unsubstantiated opinion about the great importance of mitigating computational complexity at the expense of compression quality, the Examiner's suggested inferences and modifications are: (1) contrary to the overall teachings and goals of the cited reference, (2) based on a factually incomplete, and thus inaccurate, reading of the reference with regard to Fig. 1, and (3) specifically contradicts the text of the cited reference.

With regard to the description of Fig. 1, the cited reference states:

"We now present the outline of a terrestrial broadcasting system that is "ideal" in the sense that it is intended to meet the requirements previously discussed. It uses some of the techniques that were mentioned earlier and is suitable for use either with a centralized transmitter or in a single frequency network. The latter gives the highest possible spectrum efficiency; the former gives spectrum efficiency at least as good as the all-digital schemes.....

.....**A pyramid scheme as in Fig. 1 is used. A high-level block diagram of one level of the coder is shown in Fig. 6. It is clear that the system is closely related to MPEG.** The input signal to the coder is the difference between the filtered original and the image as reconstructed by the receiver from the lower levels, if any. A low-pass filter picks out the portion of the difference signal to be coded. The resulting signal is down-converted and **the predicted frame at the same level is subtracted.** The **prediction error** is subjected to a wavelet transform (any other transform might be used) and the coefficients to be retained are then adaptively selected. The selected coefficients are transmitted as analog samples and the adaptive selection information is transmitted digitally using less than one bit/sample. [Schreiber, Page 974].

As well known, prediction frames are a motion based compression concept and entity. Furthermore, as evident from a complete reading of Schreiber, the pyramid encoding scheme of Fig. 1 is actually described as including the coder of Fig. 6, which according to Schreiber

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is “closely related to MPEG”. This statement contradicts the Examiner’s assertion that Fig. 1 teaches single frame based compression.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the 102 type rejections of claims 26, 28-29, 33-34, 36, 37, and 39-40.

### **35 U.S.C. § 103 Rejections**

In the Office Action, the Examiner rejected claims 12-22, 24-25, 27, 31-32, 35 and 38 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Seroussi (US 5,764,374).

In the Office Action, the Examiner rejected claim 23 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Seroussi and further in view of Shattil (US 2004/0141548).

In the Office Action, the Examiner rejected claim 30 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Shattil.

In the Office Action, the Examiner rejected claim 41 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber.

In the Office Action, the Examiner rejected claims 42-44, 46, and 49 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Taubman (US 6,778,709).

In the Office Action, the Examiner rejected claims 45 and 47-48 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Taubman and further in view of Seroussi.

In the Office Action, the Examiner rejected claims 50-54 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Schreiber in view of Van (US 2003/0179938).

Applicants respectfully traverse these 103 type rejections based on the Shreiber reference for the same reasons stated above.

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In view of the foregoing amendments and remarks, the pending claims are considered allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 50-3400.

Respectfully submitted,

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